# Repeat Abortions among Adolescent and Young Women in Kenya

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Unsafe abortions are a leading cause of death among 10-24 year old females in sub-Saharan Africa. Although, repeat abortions exacerbate the risk for poor health outcomes, there has been minimal interrogation of the prevalence of and factors associated with repeat abortions in this age group. In this study, we examine the prevalence of repeat abortions and associated factors among young females aged 10-24 years in Kenya. We use data from a nationwide survey conducted in 2012 among women presenting for post-abortion care services in 350 nationally-representative levels 2-6 facilities. All eligible women presenting for treatment during a one-month data collection period completed a Prospective Data Survey, which gathered information on socio-demographic characteristics, reproductive and clinical histories, and physical examination assessments. Of the 1,383 young women presenting for care, 9% reported a previous abortion. We present key findings and discuss the implications for practice and further research.

#### **BACKGROUND**

Unsafe abortions are a leading cause of morbidity and mortality in many sub-Saharan African countries [1]. In Kenya, 35% of maternal deaths are attributed to unsafe abortions [2, 3]. Young women and girls ages 10-24 years are at heightened risk for unsafe abortions due to their high vulnerability to unintended pregnancies [4-6]. Although Kenya recently promulgated a new constitution, which offers a more liberal stance on induced abortion [7], societal attitudes towards induced abortion remain negative. Thus, young women often resort to unsafe abortions performed under unsanitary conditions and/or assisted by untrained persons [8].

Repeat unsafe abortions are likely to exacerbate the health risks to women. However, there has been minimal interrogation of the prevalence of and factors associated with repeat abortions among young women and girls. In this study, we examine the prevalence of repeat abortions and associated factors among young females aged 10-24 years in Kenya.

#### **METHODS**

## Data and procedures

This study draws on data from a larger study on the magnitude and incidence of induced abortion in Kenya conducted in 350 nationally-representative levels 2-6 facilities in Kenya. Health facilities were selected using a stratified random sampling procedure based on the Kenya Essential Package for Health (KEPH) classification of six levels of preventive and curative health services. From a list of 2,838 levels 2-6 facilities able to provide PAC services, a nationally-representative sample of 350 facilities was selected. All eligible women presenting for abortion-related treatment during a 1-month data collection period (April-May 2012) completed a Prospective Data Survey (PDS), which gathered information on socio-demographic characteristics, reproductive and clinical histories, and physical examination assessments. Data were collected by trained facility-based health providers.

During the 1-month data collection period, 1,408 young women and girls aged 12-24 years presented for abortion-related treatment and completed the PDS. Data from 25 respondents whose index

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pregnancy had a gestational age of more than 24 weeks were excluded from the analysis. Thus, the final analytic sample comprises 1,383 young women aged 12-24 years.

## Ethical considerations

Approval to conduct the study was obtained from Kenyan Medical Research Institution (KEMRI). Verbal consent was obtained from all women presenting for PAC prior to data collection.

## Analyses

Descriptive statistics of the respondents' socio-demographic characteristics, reproductive and clinical histories, as well as physical examination findings and diagnosis will be computed. Bivariate and multivariate analyses will be conducted to examine factors associated with repeat abortion.

#### SELECTED RESULTS

A total of 1,383 young women and girls aged 10-24 years presented for abortion-related care. Table 1 summarizes respondents' socio-demographic characteristics and reproductive histories by age and residence. Thirty-four percent of participants were aged 10-19 years. About half (51%) never been married. Majority reported Christian religious affiliation (87%) and 34% had completed secondary or higher education.

**Table 1**. Socio-demographic profile (%) of young women and girls (10-24 years) seeking abortion care

	Previous history of induced abortion		
		Previous	_
	None	abortion	Total
	n=1,280	n=98	
	(91%)	(9%)	N=1,378
Age group	,	, ,	
10-19 years	34	36	34
20-24 years	66	64	66
Residence*			
Urban	38	64	40
Rural	62	36	60
Education <sup>†</sup>			
No education/incomplete primary	29	11	27
Complete primary	17	23	17
Incomplete secondary	20	27	21
Complete secondary	23	30	23
Post-secondary	11	9	11
Marital status			
Never married	50	63	51
Currently/formerly married	50	37	49
Religion*			
Roman Catholic	19	27	19
Other Christian	68	64	68
Muslim	11	2	10
Other/No religion	2	8	2
Occupation*			
Farmer/unskilled laborer	20	32	21
Skilled/clerical/sales/services	12	19	12
Student	26	36	27
Housewife	27	4	25
Unemployed/Other	16	9	16

 $^\dagger p < 0.10; ^* p < 0.05$  for differences between young women based on previous history of induced abortion based on chi-square tests

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## Factors associated with repeat abortion

Table 2 summarizes the obstetric profile of young women seeking abortion care by previous history of induced abortion. A greater proportion of women reporting a previous abortion (47%) reported the use of a method of contraception to prevent the index pregnancy compared with those reporting no previous induced abortion (23%). However, a large proportion of these women were using methods with high failure rates. Specifically 41% of contraceptive users who stated that they had a previous abortion reported the use of emergency contraception while 12% reported the use of the rhythm method, withdrawal or lactational amenorrhea. The proportion of women reporting the use of these methods in the group reporting no previous abortions was 28% and 8%, respectively. In addition, a greater proportion of young women who stated that they had a previous induced abortion (82%) reported their index pregnancy as unintended compared with women reporting no previous induced abortion (64%).

**Table 2**. Obstetric profile (%) of young women and girls (10-24 years) seeking abortion-care services

Services	Previous history of induced abortion		
	None n=1,280	Previous abortion n=98	Total
Parity	(91%)	(9%)	N=1,378
()	63	62	63
1	22	26	23
2+	15	12	15
Contraception used (pre-abortion)*	13	12	13
No	77	53	75
Yes	23	47	25
Type of contraception used (pre-abortion) <sup>†</sup>		.,	
Pill	21	26	21
Injection/implant/IUD	31	9	29
Male condom	11	12	11
Emergency contraception	28	41	30
Rhythm/withdrawal/LAM	8	12	9
Pregnancy desired*			
Then	34	7	31
Later	31	33	31
Not at all	33	49	34
Unsure	3	10	3
Contraception used (post-abortion) <sup>†</sup>			
Provided a modern method of contraception	53	72	55
Referred for contraceptive services	18	11	17
No contraception nor referral	29	17	28

<sup>†</sup>p<0.10; \*p<0.05 for differences between young women based on previous history of induced abortion based on chi-square tests

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#### **REFERENCES**

- 1. Grimes DA, Benson J, Singh S, Romero M, Ganatra B, Okonofua FE, Shah IH: **Unsafe abortion: the preventable pandemic**. *Lancet* 2006, **368**:1908-1919.
- 2. Evens E, Otieno-Masaba R, Eichleay M, McCarraher D, Hainsworth G, Lane C, Makumi M, Onduso P: Post-Abortion Care Services for Youth and Adult Clients in Kenya: A Comparison of Services, Client Satisfaction and Provider Attitudes. *J Biosoc Sci* 2014, **46**:1-15.
- 3. Ministry of Health: **Kenya National Post Abortion Care Curriculum: Trainer's Manual**. Nairobi: Ministry of Health; 2003.
- 4. Herrick A, Kuhns L, Kinsky S, Johnson A, Garofalo R: **Demographic, Psychosocial, and Contextual Factors Associated With Sexual Risk Behaviors Among Young Sexual Minority Women**. *J Am Psychiatr Nurses Assoc* 2013, **19**:345-355.
- 5. Zolna M, Lindberg L: Unintended Pregnancy: Incidence and Outcomes Among Young Adult Unmarried Women in the United States, 2001 and 2008. New York: Guttmacher Institute; 2012.
- 6. Hubacher D, Olawo A, Manduku C, Kiarie J, Chen P-L: **Preventing unintended pregnancy among young women in Kenya: prospective cohort study to offer contraceptive implants**. *Contraception* 2012, **86**:511-517.
- 7. National Council for Law Reporting: **Constitution of Kenya**. Nairobi, Kenya: National Council for Law Reporting with Authority of the Attorney General; 2010.
- 8. World Health Organization (WHO): **Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008**. Geneva: WHO; 2011.